

amendments correct matters of language and form, or correct improper dependency, and as such introduce no new matter, and do not narrow the scope of the claims in any way.

Specifically, new claims 27-31 represent matter deleted from claim 20 as filed. New claims 32 and 33 correspond to the subject matter of originally filed claim 25, rewritten in independent form with a proper dependent claim. The amendments therefore introduce no issue of new matter and Applicants respectfully request their entry.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: April 18, 2001

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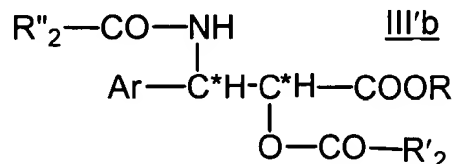
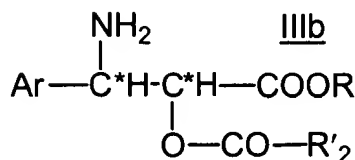
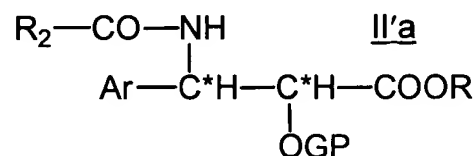
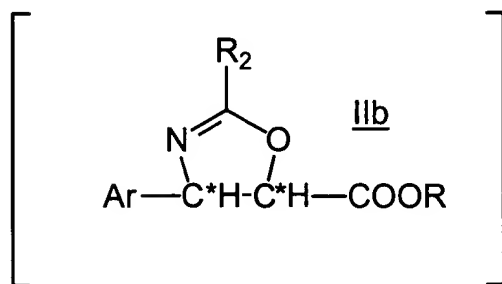
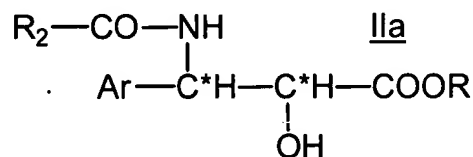
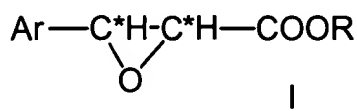
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## APPENDIX OF AMENDMENTS TO CLAIMS 12-14, 17-24, AND 26

12. (Once Amended) [Precursor compounds of taxane side chains, characterized in that they]

A precursor compound of at least one taxane side chain, wherein said precursor compound comprises at least one compound of [are selected from the derivatives of following general] formulae I, IIa, [IIb,] II'a, IIIb and III'b, or derivatives thereof:



[in which] wherein

Ar is an aryl radical, R<sub>2</sub> is an aryl radical, R'<sub>2</sub> is an aryl radical, a lower alkyl radical, or a lower perhaloalkyl radical, R''<sub>2</sub> is an aryl radical, a lower alkyl radical, or a lower perhaloalkyl radical, and GP is a protective group [are defined in one of claims 1 to 3 and 5], and

R represents an optically pure enantiomer of a highly sterically hindered chiral hydrocarbon radical.

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13. (Once Amended) [Compounds] A compound according to one of claims [claim] 12 or 14, [characterized in that] wherein R is [one of the enantiomers of the] a menthyl radical enantiomer, [in particular] optionally (+)-menthyl.

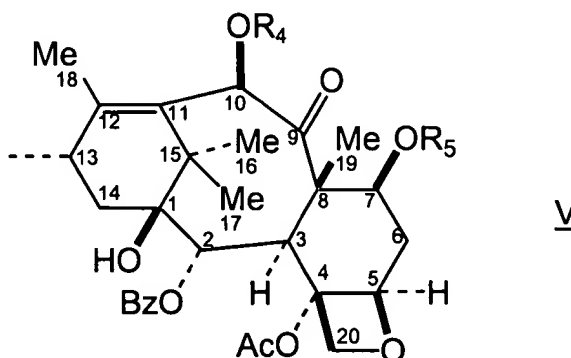
14. (Once Amended) [Compounds] A compound according to [either of claims] claim 12 [and 13], [characterized in that] wherein the cis- $\beta$ -phenylglycidate derivative of general formula I is of (2R,3R) configuration, and the derivatives of general formulae IIa, [IIb,] IIIb and III'b are of (2R, 3S) configuration.

17. [Process for the preparation of taxanes] A process for preparing a taxane of general formula IV,

C-B IV

[in which] wherein

B represents a radical of general formula V



[in which] wherein

Ac [represents the] is an acetyl radical,

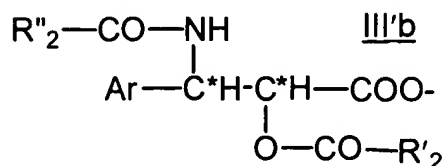
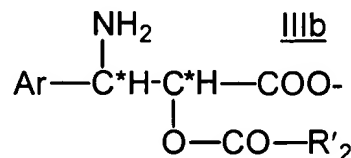
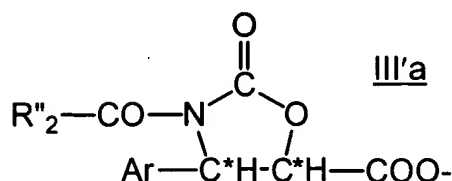
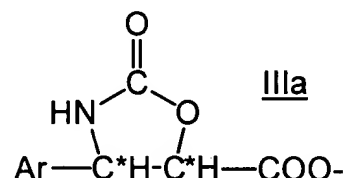
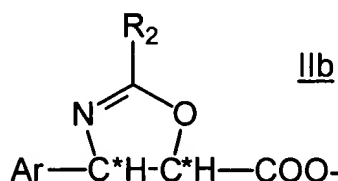
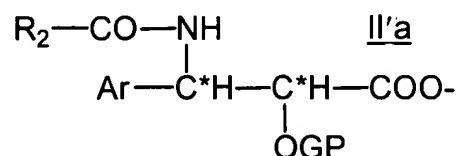
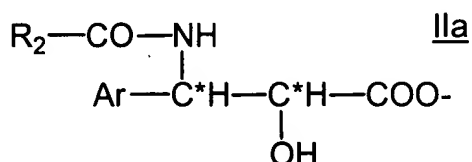
Bz [represents the] is a benzyl radical,

Me [represents the] is a methyl radical,

R<sub>4</sub> [represents] is an acetyl radical, or a protective group for the hydroxyl functional group, represented by GP1, [and]

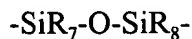
R<sub>5</sub>[, represents] is a protective group for the hydroxyl functional group represented by GP2, wherein GP1 and GP2 are chosen independently of one another from conventional protective groups employed in a hemisynthesis of taxanes, and

C [represents] is a side chain chosen from [the radicals of following] formulae IIa, II'a, IIb, IIIa, III'a, IIIb, and III'b:



[in which] wherein Ar is an aryl radical, R<sub>2</sub> is an aryl radical, R'<sub>2</sub> is an aryl radical, a lower alkyl radical, or a lower perhaloalkyl radical, R''<sub>2</sub> is an aryl radical, a lower alkyl radical, or a lower perhaloalkyl radical, and GP is a protective group, [are defined above, by esterification of] comprising esterifying an appropriate baccatin III derivative of general formula V, carrying a C-13 hydroxyl functional group, with [one of the derivatives] a derivative of formulae IIa, II'a, IIb, IIIa, III'a, IIIb [and] , or III'b, [for which] wherein R represents a hydrogen atom, [obtained by the process according to claim 11] and is obtained by controlled saponification.

18. (Once Amended) [Process] A process according to claim 17, [characterized in that] wherein the GP1 and GP2 protective groups are[, independently of one another, conventional groups employed in the hemisynthesis of taxanes, such as] independently chosen from trialkylsilyls, [or] TROC, [or] linear or branched bulky haloalkoxycarbonyl radicals comprising at least one halogen atom, acyl radicals in which the carbon [a] α to the carbonyl functional group carries at least one oxygen atom, or a trialkylgermanyl radical, or GP1 and GP2 together form a divalent radical of formula

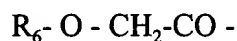


[in which] wherein

R<sub>7</sub> and R<sub>8</sub>, independently of one another, each represent a sterically hindered alkyl radical.

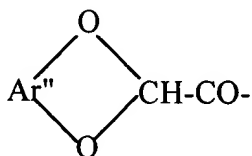
19. [Process] A process according to either one of claims 17 [and] or 18, [characterized in that] wherein the acyl radicals in which the carbon [a] α to the carbonyl functional group carries at least one oxygen atom are chosen from

- alkoxy- or aryloxyacetyl radicals of formula



wherein [in which]  $R_6$  [represents] is a sterically hindered alkyl radical, a cycloalkyl radical, or an aryl radical,

- or arylidenedioxyacetyl radicals of formula



wherein [in which]  $Ar''$  represents an arylidene radical.

20. (Once Amended) [Process] A process according to claim 19, [characterized in that] wherein:

the sterically hindered alkyl radical is a linear or branched  $C_1$ - $C_6$  alkyl radical, substituted by at least one [or more] bulky [substituents] substituent chosen from halogens, [or] linear or branched  $C_1$ - $C_6$  alkyl, linear or branched  $C_1$ - $C_6$  alkoxy, [or]  $C_3$ - $C_6$  cycloalkyl, and [or] aryl radicals,

the cycloalkyl radical is a  $C_3$ - $C_6$  cycloalkyl radical, optionally substituted by at least one [or more] bulky [substituents] substituent independently chosen from halogens, [or] linear or

branched C<sub>1</sub>-C<sub>6</sub> alkyl, linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy, [or] and aryl radicals[, preferably a cyclohexyl radical substituted by one or more linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radicals, for example menthyl, its racemate or its enantiomers and their mixtures in all proportions],

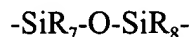
the aryl radical is a phenyl, naphthyl, anthryl or [phenantryl] phenanthryl radical, optionally substituted by at least one [or more] bulky [substituents] substituent chosen from halogens, [or] linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl, linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy, or aryl radicals,[ in particular the phenyl radical, preferably a phenyl radical optionally substituted by one or two above bulky substituents ortho- and ortho'- to the ether bond,] and

the arylidene radical is a phenylene, naphthylene, anthrylene or phenanthrylene radical, optionally substituted by at least one [or more] bulky [substituents] substituent chosen from halogens, [or] linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl, linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy, and [or] aryl radicals[, in particular the phenyl radical].

21. (Once Amended) [Process] A process according to either one of claims 17 [and] or 18, [characterized in that] wherein R<sub>4</sub> represents an acetyl radical, and GP2 [represents] is chosen from a trialkylsilyl, 2,2,2- trichloroethoxycarbonyl, 2,2,2-tribromoethoxycarbonyl, 2,2,2,1-tetrachloroethoxycarbonyl, 2,2,2-trichloro-*t*-butoxycarbonyl, trichloromethoxycarbonyl, phenoxyacetyl, and [or] trialkylgermany [radical] radicals.

22. (Once Amended) [Process] A process according to either one of claims 17 [and] or 18, [characterized in that] wherein R<sub>4</sub> represents a GP1 group, and GP1 and GP2 [represent]

are independently chosen from a 2,2,2-trichloroethoxy-carbonyl [or] and a phenoxyacetyl radical, or together form a divalent radical of formula



in which  $\text{R}_7$  and  $\text{R}_8$  each represent an isopropyl radical.

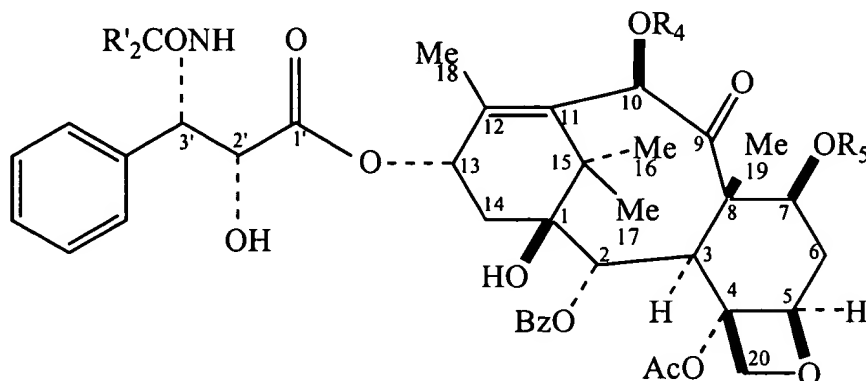
23. (Once Amended) [Process] A process according to [one of claims] claim 17 or 18 [to 21], [characterized in that] wherein

$\text{C}$  [represents] is a radical of formula IIa with  $\text{Ar}_i$  [and]

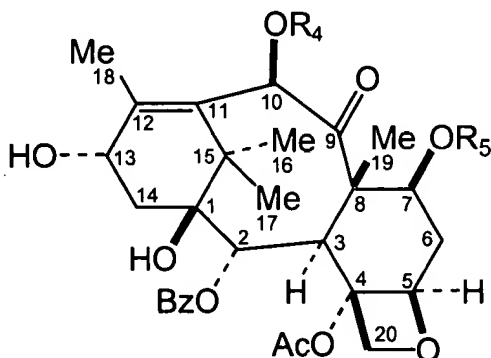
$\text{R}_2$  [representing] is a phenyl radical; and

$\text{R}_4$  [represents] is an acetyl radical.

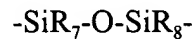
24. (Once Amended) [Process] A process according to [one of claims] claim 17 or 18 [to 23], [characterized in that, subsequently,] further comprising deprotecting the hydroxyls of the derivatives of general formula IV [are deprotected] and[, if appropriate,] optionally, simultaneously or separately, opening the oxazoline ring of the radicals of formula IIb or IIIa [is opened, in order to produce] wherein a taxane derivative of general formula VI is produced







R<sub>5</sub> [represents] is a protective group for the hydroxyl functional group represented by GP2, [and] wherein GP1 and GP2 are[,] selected independently of one another[,] from bulky haloalkoxycarbonyl radicals, with the exception of [TrOC] TROC, acyl radicals in which [the] a carbon [a] α to the carbonyl functional group carries at least one oxygen atom, [or] and trialkylgermany radicals, or GP1 and GP2 together form a divalent radical of formula



[in which] wherein

R<sub>7</sub> and R<sub>8</sub>, selected independently of one another, represent a sterically hindered alkyl radical.

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